
C L I N I C A L

1st Edition

PATHOLOGY

for clinical round exam

5th year Faculty of Medicine
Tanta University

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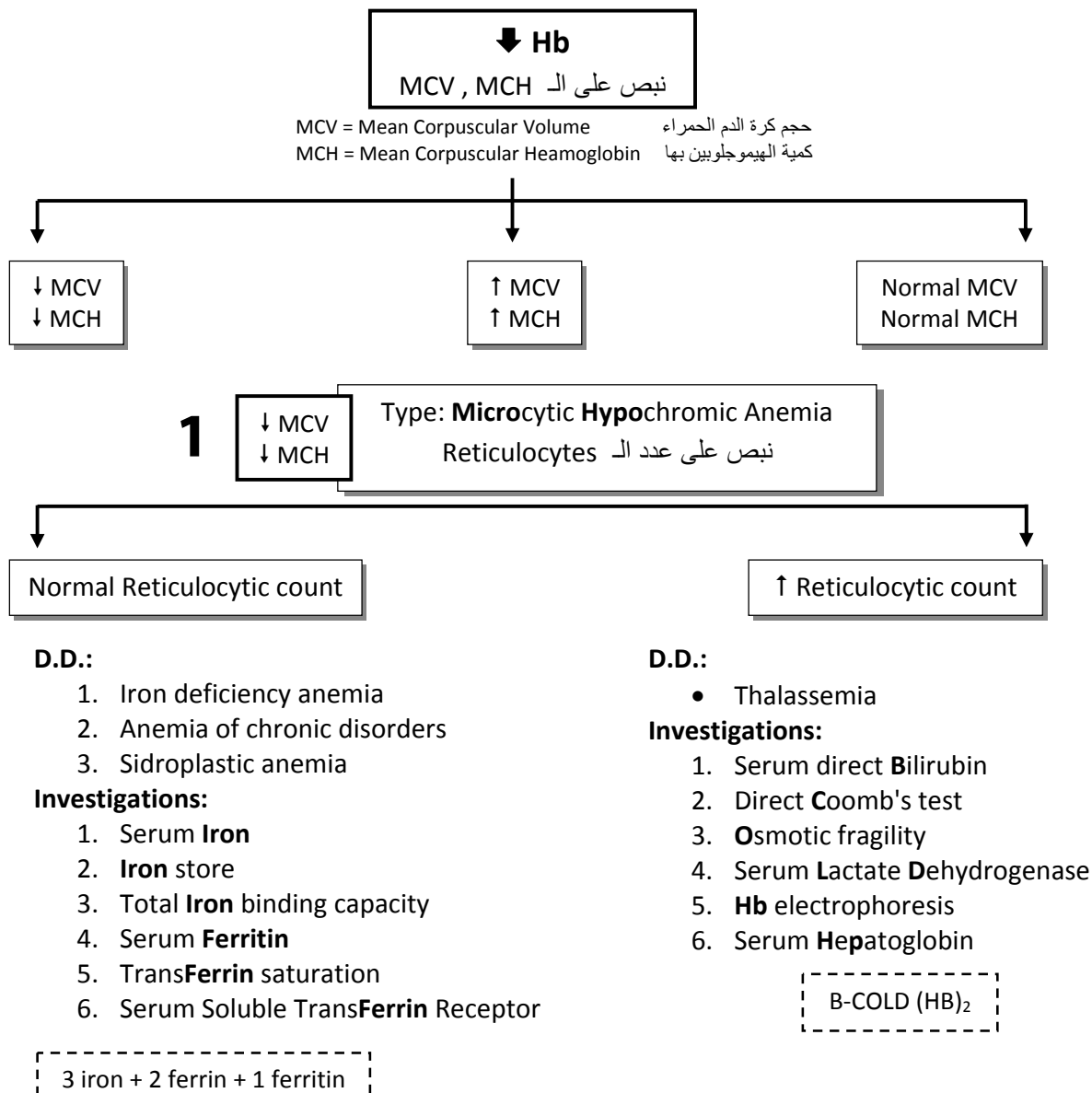
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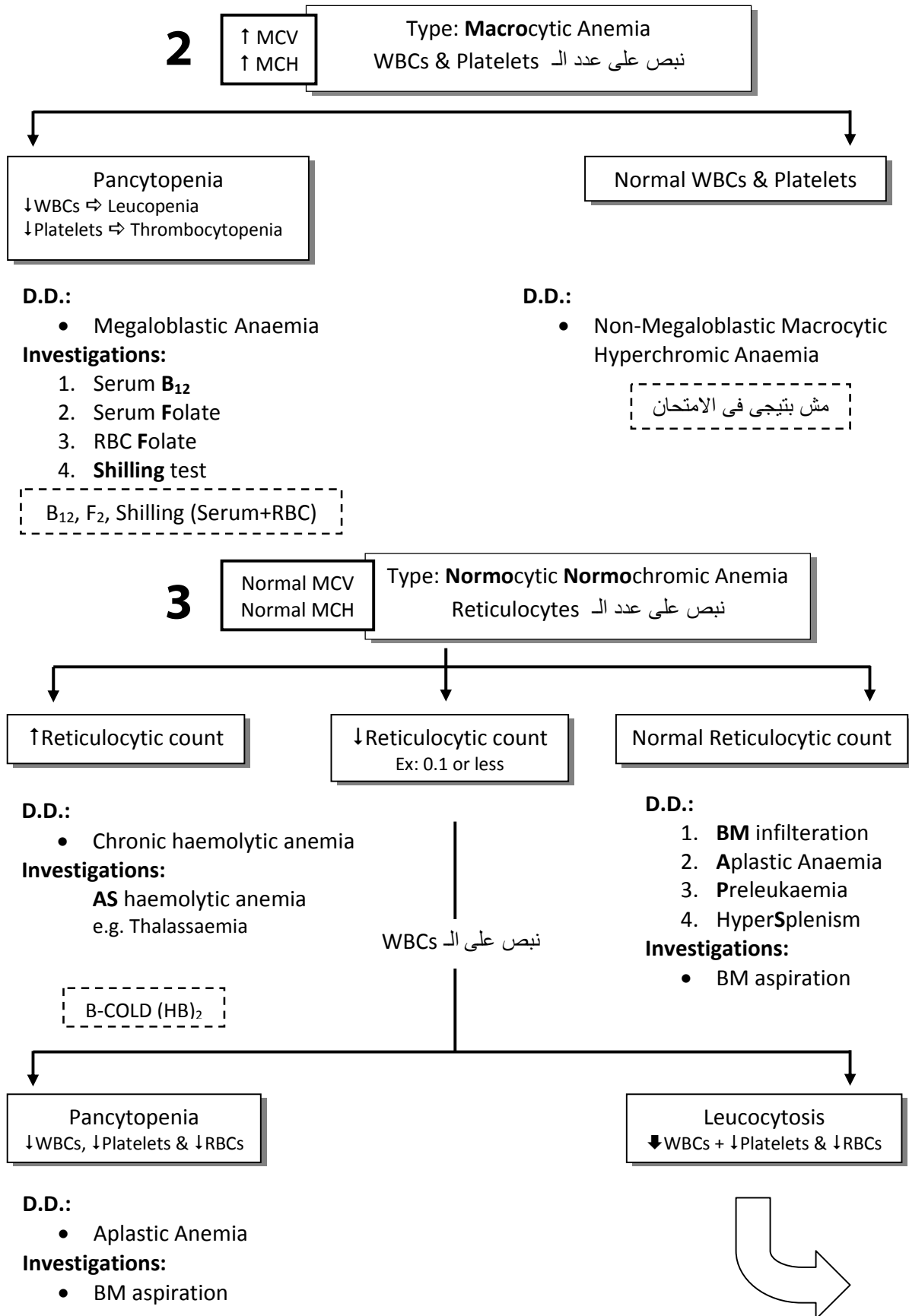
Introduction

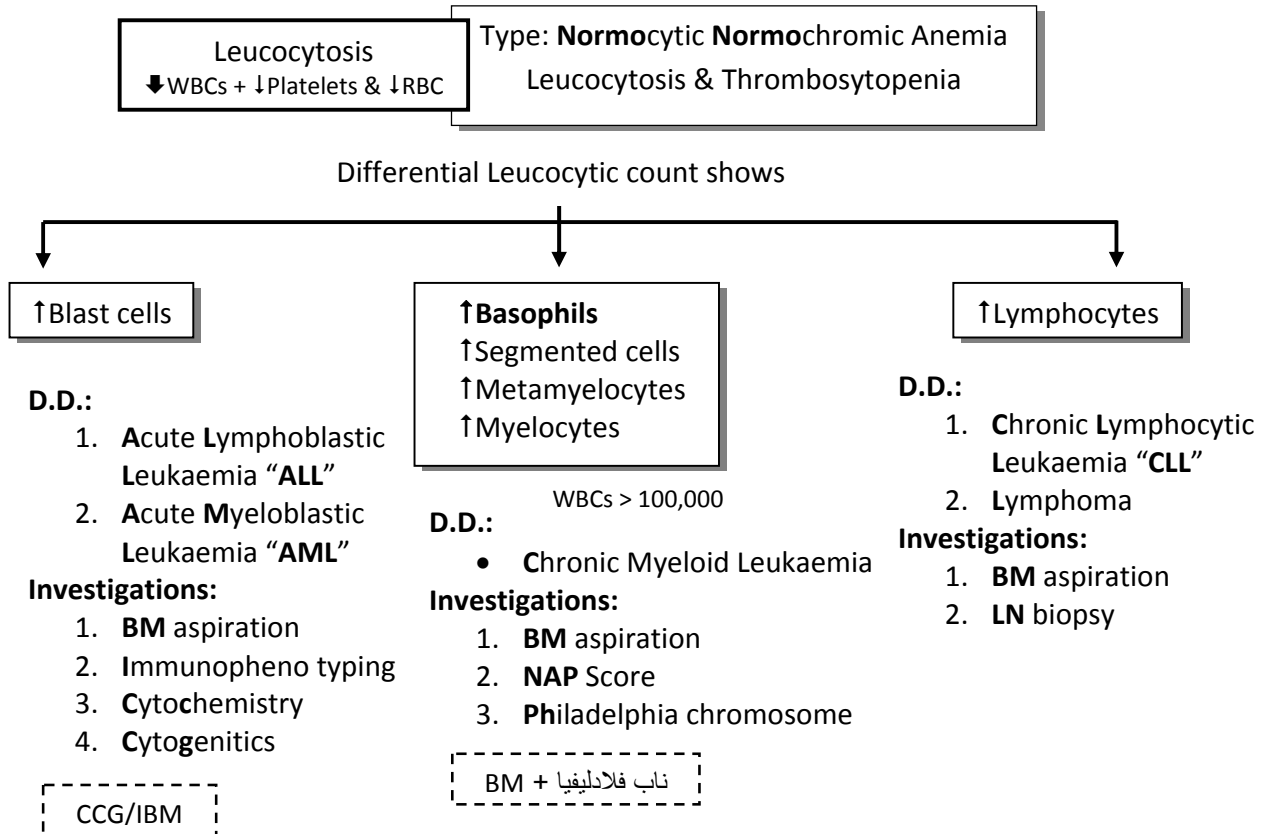
- المنهج عبارة عن شوية حاجات تبع الـ Blood وشوية حاجات تبع الـ Chemistry
- الـ Blood عبارة عن 3 أنواع من الـ Anemia الى جانب الـ Leukemia
- الـ Chemistry عبارة عن
- Blood Glucose report, Urine report, Liver function & Kidney function
- الإمتحان بقى عبارة عن Two Reports واحد منهم Blood والثانى Chemistry
- كل Report عبارة عن صورة تحليل ويكون مكتوب الأرقام الـ Normal واللى عليك إنك تعرف إيه الـ Abnormal

Blood Report

بنتكلم فيه عن الـ Abnormal findings, Type, Differential Diagnosis & Investigations
أول لما يجيلنا تحليل Blood نبص على نسبة الـ Hb ولو لقيتها قليلة يبقى فيه Anemia

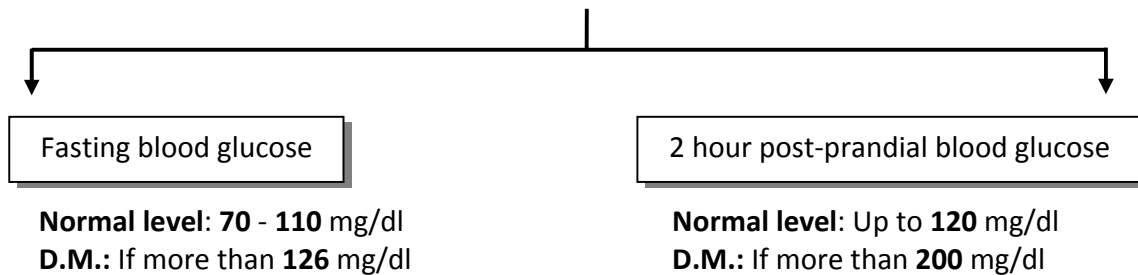






Blood Glucose Report

لازم الأرقام تتحفظ كويس جدا



المطلوب منك فى الإمتحان انك تقول ان الحالة دى D.M. ولا Normal بس

Urine Report

The report will be D.D. for the following:

Volume

Polyuria:

1. Drugs (*Caffeine, Alcohol or Diuretics*)
2. Diseases (*DM, DI or Chronic Renal Failure*)

Oliguria:

1. Dehydration (*Diarrhea or Vomiting*)
2. Renal ischemia
3. Disease as:
 - a. Oliguric phase ch. Nephritis
 - b. Acute tubular necrosis
 - c. Acute glomerulonephritis
 - d. Urinary tract obstruction

Aspect

Causes of turbid aspect:

1. PPT (*Phosphate or Urate*)
2. Pus
3. Bacteria
4. Mucus
5. RBCs
6. Chyluria

Albumin

Causes of proteinuria:

1. Orthostatic (*postural*):
 - a. Upright position
 - b. Recumbency (*urine of early morning disappears*)
2. Functional (*transient*):
 - a. Fevers
 - b. Severe exercise
 - c. Heat stroke
 - d. Severe cold atmosphere
 - e. Congestive heart failure
3. Kidney diseases:
 - a. Acute/Chronic glomerulonephritis
 - b. Pyelonephritis
 - c. Nephrotic syndrome
 - d. Renal TB
 - e. Tumors
4. Urinary tract diseases:
 - a. Calculi
 - b. Infections

Sugar

Causes of sugar presence in urine:

1. DM
2. Poison (*Morphine or CO*)
3. Alimentary glucosuria (*intake*)
4. Renal glucosuria (*incomplete reabsorption from tubules*)

Colour

Amber yellow	<i>Normal</i>
Watery	<i>DI, Diuretics or Excess fluid intake</i>
Red	<i>Eating beets, Hemoglobinuria, Hematuria or Polyuria</i>
Yellow or Greenish Brown	<i>Bile pigments or Obstruction</i>
Orange red	<i>Urobilin or Urobilinogen</i>
Dark	<i>Alkaptonuria or Melanuria</i>
Milky	<i>Lymph or Chylomicrons</i>

Casts

Hyaline	<i>Benign hypertension Nephrotic syndrome Exercise</i>
Epithelial	<i>Tubular damage Nephrotoxin Viremia</i>
Granular	<i>Acute tubular necrosis</i>
Waxy	<i>Severe chronic disease Amyloidosis</i>
Fatty	<i>Nephritic DM</i>
Red cell	<i>Acute glomerulonephritis Lopus nephritis Subacute bacterial endocarditis Good pastur's disease Streptococcal infection Malignant hypertension</i>
WBC	<i>pyelonephritis</i>

RBCs & WBCs

RBCs	<i>Trauma Pyelonephritis</i>
WBCs (Pus cells)	<i>UTI TB Tumors Acute glomerulonephritis Interstitial nephritis Analgesic abuse</i>

Liver Function Tests

↑ Total Bilirubin

Jaundice

	Hemolytic	Hepatocellular	Obstructive
Direct bilirubin		↑	↑
Indirect bilirubin	↑	↑	
Alkaline Phosphatase		↑ (<30)	↑ (>30)
SGPT "ALT"		↑	
SGOT "AST"		↑	
Albumin		↓ + D.D. of hypoalbuminemia	

Causes of Hypoalbuminemia:

1. ↓ Intake (*Malabsorption or Malnutrition*)
2. ↓ Synthesis (*disease*)
3. ↑ Loss (*Nephrotic syndrome or Burns*)
4. ↑ Catabolism (*Inf., Thyrotoxicosis or Cushing disease*)
5. Hemodilution (*Late pregnancy or IV therapy*)

↑ PTN	↓ PTN
Dehydration Artificial (<i>stasis during venepuncture</i>) Para proteinemia Chronic disease Liver Cirrhosis Autoimmune	Overhydration Artificial (<i>drip arm</i>) ↑ Loss (<i>Nephrotic syndrome or Burns</i>) ↓ Synthesis as in: <ol style="list-style-type: none"> 1. Protein deficiency 2. Malabsorption 3. Liver Disease

Kidney Function Tests

Normal Kidney functions if:

Normal serum creatinine level: 0.4 – 1.4 mg/dl

Normal blood urea level: 15 – 45 mg/dl

Renal Failure if:

High serum creatinine + High blood urea level

D.D. if one value is higher than normal & the other is normal

High serum creatinine “with normal blood urea level”	High blood urea level “with normal serum creatinine level”
Non-Renal: <ol style="list-style-type: none"> 1. Large muscle mass 2. ↑Protein intake 3. Vigorous exercise 4. Non-Sp. Analytic method 5. Drugs (<i>Salicylates or Cimetidine</i>) Renal: <ol style="list-style-type: none"> 1. Impaired perfusion (<i>reduced blood volume, fluid depletion or renal artery stenosis</i>) 2. Loss of nephrons' function (<i>Acute/Chronic glomerulonephritis</i>) Post Renal: <ol style="list-style-type: none"> 1. Enlarged Prostate 2. Stones or casts 	Pre Renal: <ol style="list-style-type: none"> 1. ↑Protein intake 2. ↑Catabolism (<i>Trauma + surgery, Starvation + GIT hge</i>) 3. ↓Renal perfusion (<i>Shock, Hge, Burns, Vomiting or Congenital HF</i>) Renal: <ol style="list-style-type: none"> 1. Impaired perfusion (<i>reduced blood volume, fluid depletion or renal artery stenosis</i>) 2. Loss of nephrons' function (<i>Acute/Chronic glomerulonephritis</i>) Post Renal: <ol style="list-style-type: none"> 1. Enlarged Prostate 2. Stones or casts

Special thanks to:

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If you have any ideas for the next edition please contact the editors

Best wishes...

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